



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/662,531	09/15/2000	Kannan Varadhan	La Porta 46-16-7-4-6	1919
50959 7590 05/14/2007 WERNER & AXENFELD, LLP P.O. BOX 1629 WEST CHESTER, PA 19380			EXAMINER SHAND, ROBERTA A	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 05/14/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/662,531

Applicant(s)

VARADHAN ET AL.

Examiner

Roberta A. Shand

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-11, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue in view of Warrier.

6. Regarding claim 1, Inoue teaches (fig. 12) a method creating a bootstrapping agent (col. 18, lines 59-62) that works cooperatively with a M-IP home agent to allocate a temporary home address (Inoue teaches acquiring a home address for the mobile) to the host that powers up in a foreign network (Inoue teaches that the mobile is turned on in the visited site, col. 16, lines 8-13); using the M-IP protocol to contact the M-IP home agent and request the bootstrapping agent to allocate the temporary home address to the host (col. 16, line 60 – col. 17, line 16) including a permanent home address allocated by a DHCP protocol between the mobile and the home network (fig. 12) when the mobile powers up in the foreign network, thereby allowing the mobile host that powers up in a foreign network to connect to the internet,

7. Inoue does not teach using the temporary home address to create a temporary tunnel between foreign agents associated with the host and the M-IP home agent, wherein the temporary tunnel is used to communicate configuration information.

8. Warrier teaches (abstract) using the temporary home address to create a temporary tunnel between a foreign agent associated with the host and the M-IP home agent, wherein the

Art Unit: 2616

temporary tunnel is used to communicate configuration information. It would have been obvious to one of ordinary skill in the art to adapt this to Inoue's system to ensure that the data is efficiently sent to the mobile when it is visiting another site (network).

9. Regarding claim 2, Inoue teaches (col. 5, lines 47-59) the foreign agent is co-located with the host.

10. Regarding claim 3, Warriar teaches (fig. 1) the foreign agent is located on a device that is external to the host and resides in the foreign network

11. Regarding claims 4 and 6, as for the bootstrapping agent assigning address from a pool of addresses, it is inherent in Inoue's system that a plurality of addresses are available in dynamic address allocation protocol (abstract).

12. Regarding claim 5, as for the private address taking the form 10*, this is a well known format of address in private network's and It would have been obvious to one of ordinary skill in the art to adapt this to Inoue and Warriar's as it is in the art.

13. Regarding claim 7, Inoue teaches (col. 16, line 60 – col. 17, line 67) a DHCP client located on the host is used to generate messages requesting the configuration information from a DHCP server via the temporary tunnel.

Art Unit: 2616

14. Regarding claim 8, as for the messages generated by the DHCP client are modified at the host to have a format consistent (col. 18, lines 59-62) with a DHCP relay, it is inherent in Inoue's system that messages generated by the DHCP client has a consistent format.

15. Regarding claim 9, Inoue teaches (fig. 12) a method for enabling a mobile host without an IP home address to connect to the internet when powering up in a foreign network (Inoue teaches that the mobile is turned on in the visited site, col. 16, lines 8-13), comprising: obtaining a temporary IP home address for the host powering up in a foreign network (col. 18, lines 59-62) without an IP home address from an IP address source accessible through a mobile IP home agent; acquiring configuration parameters including a permanent IP home address from a DHCP server (fig. 4) in the home network of the host;

16. Inoue does not teach establishing a transient tunnel between the mobile IP home agent and a mobile foreign agent associated with the mobile host while the foreign network.

17. Warrior teaches establishing a transient tunnel between the mobile IP home agent and a mobile foreign agent associated with the mobile host while the foreign network. using the temporary IP home address (col. 6, line 62 – col. 7, line 6); replacing the transient tunnel with a new tunnel between the mobile IP home agent and the mobile IP foreign agent using the permanent IP home address, therefore allowing the mobile without an IP home address to connect to the Internet when powered up in a foreign network (Warrior teaches that once the mobile is in the foreign network, after registration of the mobile host, a tunnel is created to transmit data to the mobile host in the foreign network between the foreign agent and the home agent, see fig. 3). It would have been obvious to one of ordinary skill in the art to adapt this to

Art Unit: 2616

Inoue's system to ensure that the data is efficiently sent to the mobile when it is visiting another site (network).

18. Regarding claim 10, Inoue teaches (fig. 12) a method for enabling configuration of a portable host device that powers up in a foreign network to communicate using the internet, comprising: communicating a temporary home address to the host that powers up in a foreign network from bootstrapping agent operating cooperatively with a mobile IP home agent that serves the host device when it operates in the foreign network (col. 18, lines 59-62); and obtaining a permanent address from a DHCP server via the transient bi-directional communication link, wherein the permanent address use thereafter to configure the host to communicate with the internet.

19. Inoue does not teach establishing a transient bi-directional link between the host and the mobile IP home agent using the M-IP protocol and the temporary home address

20. Warrior teaches establishing a transient bi-directional link between the host and the mobile IP home agent using the M-IP protocol and the temporary home address (col. 6, lines 33 – 62, Warrior teaches data being sent to the mobile via the home agent, because of the permanent address being associated with the home agent, and the home agent sending the data to the mobile host via the foreign agent see fig. 3). It would have been obvious to one of ordinary skill in the art to adapt this to Inoue's system to ensure that the data is efficiently sent to the mobile when it is visiting another site (network).

Art Unit: 2616

21. Regarding claim 11, Warriar teaches (fig. 3) additional configuration parameters are provided to the host via the transient bi-directional communication link. (Warriar teaches setting up the lifetime with the home agent which is additional configuration parameters)

22 Regarding claim 13, Inoue teaches (fig. 12) a method for configuring a mobile that powers up in a foreign network (Inoue teaches that the mobile is turned on in the visited site, col. 16, lines 8-13), comprising: a M-IP protocol to connect the mobile host that powers up in a foreign network to its home network (col. 18 line 59 - 62) using an IP broadcasting (col. 12, lines 20-28) protocol so that the host can discover a addressing DHCP server in its home network, and using the DHCP protocol to communicate addressing and configuration information between the server and the mobile (col. 1, 1-56).

23. Inoue does not teach setting up a temporary IP tunnel

24. Warriar teaches (abstract) using the temporary home address to create a temporary tunnel between a foreign agent associated with the host and the M-IP home agent, wherein the temporary tunnel is used to communicate configuration information. It would have been obvious to one of ordinary skill in the art to adapt this to Inoue's system to ensure that the data is efficiently sent to the mobile when it is visiting another site (network).

25. Regarding claim 14, Inoue teaches (fig. 12) a method for configuring the mobile host when it powers up in a foreign network without an IP home agent address, comprising: obtaining

Art Unit: 2616

a temporary IP home address for the host from an IP address source accessible through the home server (col. 16, lines 8-67).

26. Inoue does not teach establishing a transient tunnel between the mobile IP home server and a mobile foreign server using the temporary IP home address.

27. Warriar teaches establishing a transient tunnel between the mobile IP home server and a mobile foreign server using the temporary IP home address (col. 6, lines 63 – col. 7, line 6); acquiring via the transient tunnel, permanent configuration parameters including a permanent IP home address in the region served by the home server (Warriar teaches that the MBR created by the home agent has the IP address of the mobile); replacing the transient tunnel with a new tunnel between the home server and the foreign server using the permanent IP home address. It would have been obvious to one of ordinary skill in the art to adapt this to Inoue's system to ensure that the data is efficiently sent to the mobile when it is visiting another site (network).

Response to Arguments

28. Applicant's arguments filed April 17, 2006 have been fully considered but they are not persuasive. Applicant argues that Inoue does not teach using a bootstrapping agent to assign a home address to the mobile device. Inoue teaches (col. 16, lines 8-67) and per Applicant's own admission on page 10 of Applicant's arguments, acquiring a home address for the mobile.

29. Applicant also argues that Inoue fails to teach using a temporary tunnel to obtain configuration data. Warriar, as mentioned above covers this limitation in fig. 3 and col. 6, lines

Art Unit: 2616

21-64 where is explain the process of a mobile inherently being turned on in the foreign network, a tunnel being set up and “data from the WAP server or other sources of data” being exchanged through the tunnel.

30. Applicant also argues that Warrier is void of any discussion of where a mobile is powered up in a foreign network and a temporary tunnel is used to acquire a permanent IP address. Inoue, as mentioned above teaches acquiring a permanent address (col. 16, lines 8-67). Inoue does not teach using a temporary tunnel when the mobile is powered up in the foreign network. Warrier teaches in fig. 3 and col. 6, lines 21-64 a mobile inherently powering up in a foreign network because it establishes a PPP with the foreign agent. A tunnel is then set up for data exchange.

31. Lastly Applicant argues that Warrier does not teach the idea of obtaining an IP address when the mobile is powered up in a foreign network. Inoue is relied upon to meet the limitations of powering up in a mobile network and acquiring an IP address (col. 2, lines 34-36). Warrier is relied upon to meet the limitation of establishing a tunnel when a mobile is in a foreign network and then exchanging data. Warrier also teaches that the MBR created by the home agent has the IP address of the mobile.

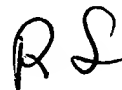
Art Unit: 2616

Conclusion

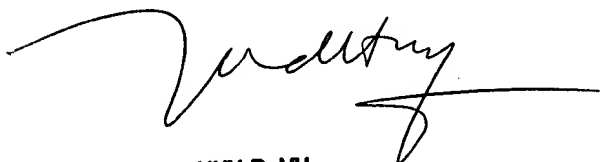
32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberta A Shand whose telephone number is 571-272-3161. The examiner can normally be reached on M-F 9:00am-5:30pm.

33. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

34. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Roberta A Shand
Examiner
Art Unit 2616



HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600